#4316 K

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

June 6, 2013

TO:

Internal File

THRU:

Joe Helfrich, Team Lead

FROM:

Ken Hoffman, Hydrologist

RE:

Midterm Permit Review, Castle Valley Mining LLC, Bear Canyon Mine,

C/015/0025, Task ID #4316

SUMMARY:

In accordance with R645-303-211, the Division of Oil, Gas, and Mining (the Division) is required to review each active permit during its term. The Division commenced the Midterm Review for the Bear Canyon Mine on April 2, 2013. A letter of commencement of review was sent to the mine and stated 5 items will be focused on during review. This technical review will focus on item C:

Review applicable portions of the permit to ensure that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

In addition, this memo addresses the permittee's compliance with the hydrology (R645-301-700) section of the Utah Coal Mining Rules. The midterm review is not recommended for approval until the deficiencies are addressed:

R645-301-731.211 The Permittee shall update Table 7-14 to reflect that monitoring is now active at sites SBC-18, SBC-20, SBC-21, SBC -22, and SCC-2.

R645-301-742 The Permittee shall update Plate 7-11 with an as-built. In addition, the permittee shall update the language on page 7-90 to reflect that Pond D has been constructed.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Surface Water Monitoring

The MRP addresses surface water monitoring network in compliance with the Utah Coal Mining Rules. In Table 7-14 water monitoring locations are listed. In the status column some locations are listed as "Active Begin sampling within 500' In 4 Mine or Mohrland". Monitoring began at sites SBC-18, SBC-20, SBC-21, SBC -22, and SCC-2 in 2012. Table 7-14 shall be updated to reflect the now active status of these monitoring locations.

Sediment Control Measures

The MRP currently addresses numerous alternative sediment control areas (ASCA) in Appendix 7-K describing the best technology currently available (BTCA) for each area. These areas are depicted in plates 7-1A to 7-1G.

Siltation Structures

The MRP currently addresses the sedimentation ponds in Section 742.220. The section describes Ponds A to D in detail. Upon review Plate 7-11 is marked as proposed and language in Section 742.220 indicates Pond D is proposed to be built in 2002. These sections of the MRP are in need of updating.

Findings:

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

R645-301-731.211 The Permittee shall update Table 7-14 to reflect that monitoring is now active at sites SBC-18, SBC-20, SBC-21, SBC -22, and SCC-2.

R645-301-742 The Permittee shall update Plate 7-11 with an as-built. In addition, the permittee shall update the language on page 7-90 to reflect that Pond D has been constructed.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Maps

Plates 7-4, 7N-2, and 7-12 depict the water monitoring locations and water rights locations and appear up to date. In addition, Plates 7-1A to 7-1G depict the sediment control features throughout the facility and appear up to date.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

RECOMMENDATIONS:

The midterm review identified the deficiencies that should be addressed.

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